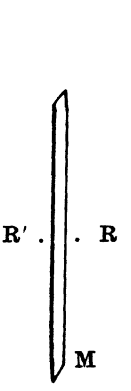
The following interesting observation should have had a more conspicuous place.—Ed.

A NEW AND SIMPLE METHOD FOR COMPARING THE PERCEPTION OF RATE OF MOVEMENT IN THE DIRECT AND INDIRECT FIELDS OF VISION.

While sitting in my room last winter, my attention was attracted by the image of a swinging lamp in the mirror, and it then occurred to me that here was a simple method for comparing the perception of rate in the direct and indirect fields of vision. I took a position where, by looking directly at the image in the mirror, the image from the lamp itself fell on the indirect field of vision. I thus had exactly the same rate, and, provided that I placed myself so that my eye would be near the glass, almost the same extent of movement of the images. The experiment at that time was roughly made, but it showed clearly the well-known fact that of two equal rates, the one seen in the indirect field seems to be the more rapid.

I have since tested the method under more favorable circumstances, and offer it as a simple demonstrational method: Take a small, clear mirror and arrange it in the median plane immediately between the eyes, so the eye of the observer may be near the edge of it. Make a pendulum of a small string weighted with a lead ball and place it at some distance away, but near enough to the plane of the mirror to make an angle of perhaps twenty or thirty degrees with it. Swing the pendulum, not too far, nor too fast, in a direction perpendicular to the plane of the mirror. If the observer now directs his eye toward some part of the arc, through which the pendulum swings, so that the image of the moving ball will cross the point of clearest vision, the image from the mirror will fall on the indirect field and the two rates can be easily compared. The following diagram will perhaps help to show the arrangement:



(Note: P = position of the pendulum; P′ = position of images as seen in the mirror; R = position of right eye, and R′ of the left; M = mirror.)

It will be well, perhaps in most cases, to cover the ball of the pendulum with white paper. It should be noticed also that the background should offer no distraction to the attention as sources of error for the judgment.

The apparent difference in the rates will be greater when the observer directs his eye toward the pendulum, because the image from the mirror will then fall on the temporal side of the retina, which is less sensitive than the nasal side, especially in an observer whose eyes are deeply set.

F. B. DRESSLAR.